

## METHODS OF DIAGNOSING MULTIDRUG RESISTANT TUBERCULOSIS

### ABSTRACT OF THE DISCLOSURE

- [94] The invention relates to the discovery that a putative gene of *Mycobacterium tuberculosis* with no previously identified function is responsible for the ability of the bacterium to activate thioamide drugs. Since *M. tuberculosis* has a low rate of synonymous mutations, all mutations in this gene, identified as Rv3854c and now termed "EtaA," are expected to inhibit the ability of a bacterium with the mutation to activate a thioamide or thiocarbonyl drug. Thus, detecting a bacterium with a mutation in this gene indicates that the bacterium is resistant to treatment with thioamides.

SF 1236972 v2

15